

In the claims

1. (Currently Amended) A system for integrated processing of information from a plurality of data systems, the system comprising:

a first network connection, the first network connection adapted to receive information sent from a terminal over a first network and also adapted to receive information sent to the terminal, the terminal displaying the POS application, wherein the terminal includes POS application off-line instructions to provide POS application functions when a data connection between the terminal and the server is inoperable;

a second network connection, the second network connection being adapted to receive information sent from the terminal over the first and second networks and also adapted to receive information sent to the terminal over the first and second network, wherein the second network is different from the first network;

a plurality of data system connections, each data system connection of the plurality of data system connections adapted to receive information sent from a respective data system of a plurality of data systems and also adapted to receive information sent to a respective data system of the plurality of data systems; and

a server coupled to the first network connection and the plurality of data system connections, the server including

a processor executing a POS application;

a point-of-sale (POS) database coupled to the server

a ringout controller;

a plurality of external system API's; and

a memory coupled to the processor, the memory including:

a plurality of data system instructions objects, wherein each data system instructions object of the plurality of data system instructions objects corresponds to a respective data system of the plurality of data systems, and wherein each data system instructions object manages communications between the terminal and the respective data system of the plurality of data systems by the data system instructions object of the plurality that corresponds to a particular data system communicating through an interface to receive login information from the terminal to thereby create a first communication session with the terminal to

exchange transactional data relevant to the particular data system and after logging in a user of the terminal within the first session with the server and by the data systems instruction object communicating with the corresponding data system through a separate application programming interface within a second session separate from the first session in order to exchange transactional data that is based on the exchange of data in the first session between the data systems instruction object of the server and the data system after logging in the user of the terminal within the first session, wherein the server further provides an icon to a GUI rendered at the terminal where the icon represents the data system that the terminal may access through the server and provides access to the data system upon being selected at the terminal and where the icon is displayed by the server at the terminal upon the server completing the login to the data system through the second session that is separate from the first session;

a trusted applet, and

a java plug-in, wherein the trusted applet and the java plug-in manage communications with the data systems instruction objects and the display of the terminal GUI, wherein further the GUI is separated into at least a Banner/Title Customer Frame, a Main Menu Frame and a Context Frame, wherein further a master applet is anchored to the Banner/Title Customer Profile Frame, wherein further the master applet is broken down into multiple physical applets.

2. (Original) The system of claim 1, wherein:

the plurality of data system connections include a first data system connection and a second data system connection, wherein the first data system connection and the second data system connection are selected from the group consisting of a credit services system connection, an inventory services system connection, a customer services system connection, and an activations system connection; and

the plurality of data system instructions objects include a first data system instructions object and a second data system instructions object, wherein the first data system instructions object and the second data system instructions object are selected from the group consisting of a credit services instructions object, an inventory services

instructions object, a customer services instructions object, and an activations instructions object, and wherein the first data system instructions object is different from the second data system instructions object.

3. (Original) The system of claim 1, the system further comprising:  
a point-of-sale (POS) database coupled to the server; and  
the memory includes a POS services instructions object.

4. (Original) The system of claim 2, wherein the memory includes an accounting services instructions object.

5. (Previously Presented) The system of claim 1, wherein the memory includes a user profile instructions object, wherein the user profile instructions object  
receives login information of the user from the terminal of the first session, and  
determines the access rights of the user for each respective data system of the plurality of data systems.

6. (Original) The system of claim 1, wherein the plurality of data systems instructions objects are object-oriented software modules.

7. (Original) The system of claim 1, wherein the plurality of data systems instructions objects are Java beans.

8. (Cancelled)

9. (Original) The system of claim 1, wherein the first network connection is a wide area network port.

10. (Currently Amended) The system of claim ~~8~~ 1, wherein the second network connection is a hypertext transmission protocol network port.

11. (Previously Presented) The system of claim 1, further comprising the terminal of the user within the first session, the terminal including a processor and a memory coupled to the processor, the memory including a web browser and an applet that communicate with the server during the first session, the terminal coupled to the server via a first network and the first network connection.

12. (Currently Amended) The system of claim-8 1, further comprising the terminal of the user, the terminal including a processor and a memory coupled to the processor, the memory including a web browser and an applet that communicate with the server during the first session, the terminal coupled to the server via a first network and the first network connection, and wherein, when the terminal is unable to communicate with the server via the first network and the first network connection, the terminal is coupled to the server via a second network and the second network connection, and wherein the second network is different from the first network.

13. (Original) The system of claim 11, wherein the terminal is adapted to:

- receive login information of a user;
- send the login information of the user to the server; and
- receive information from the server corresponding to each of the respective data systems of the plurality of data systems to which the user has access rights.

14. (Original) The system of claim 1, further comprising a plurality of data systems, each data system of the plurality of data systems being coupled to the server via a respective data system connection of the plurality of data system connections.

15. (Original) The system of claim 1, wherein the plurality of data systems include a first data system and a second data system, the first data system and the second data system being selected from a group consisting of a credit services systems, an inventory services system, a customer account services system, and an activations services system.

16. (Currently Amended) A system for integrated processing of information from a plurality of data systems, the system comprising:

a plurality of data systems, each data system of the plurality of data systems having unique user access rights, wherein each data system of the plurality of data systems is associated with a respective data system application of a plurality of data system applications wherein each data system communicates via a data systems instruction object;

a server coupled to the plurality of data systems through individual communications sessions, the server including a plurality of data system application programming interface instructions, wherein each data system application programming interface instructions of the plurality of data system application programming interface instructions corresponds to a respective data system application of the plurality of data system applications and wherein the data system application programming interface instructions provide a first set of application programming interfaces to each of the respective data system applications enabling transactional data that is based on communications with a terminal to be exchanged between the server and the respective data systems within the individual communications sessions, the server including a data systems user access database that stores user access rights to each data system of the plurality of data systems;

the terminal coupled to a second interface of the server that is separate from the first set of application programming interfaces and that enables transactional data relevant to one or more data systems to be exchanged between the terminal and the server within a first communications session after logging in of the user of the terminal with the server by receiving login information to create the first session, where the exchange of data with the server is separate from the exchange of data between the server and the data systems of the individual communication sessions after logging in of the user of the terminal within the first session with the server, the terminal including system access instructions, wherein the system access instructions send login information of the user to the server, the terminal displays icons, rendered on a GUI, that represent and provide access to selected data systems applications after the server logs in to each of the selected data systems via the individual communications sessions and then provides a notice of

the login to the terminal, the selected data system applications corresponds to a set of data system applications to which the user has access rights, and the set of data system applications to which the user has access rights is determined based at least in part on the login information of the user and the data systems user access database; and

a trusted applet, and

a java plug-in, wherein the trusted applet and the java plug-in manage communications with the data systems instruction objects and the display of the terminal GUI, wherein further the GUI is separated into at least a Banner/Title Customer Frame, a Main Menu Frame and a Context Frame, wherein further a master applet is anchored to the Banner/Title Customer Profile Frame, wherein further the master applet is broken down into multiple physical applets.

17. (Original) The system of claim 16, wherein the plurality of data systems include a credit services data system, an inventory services data system, a customer account services data system, and an activation services data system.

18. (Original) The system of claim 16, further comprising a point-of-sale (POS) database coupled to the server, the server including a POS application, the terminal displaying the POS application.

19. (Original) The system of claim 18, wherein the terminal includes  
POS application off-line instructions to provide POS application functions when a data connection between the terminal and the server is inoperable, and  
a data storage device to store a persistent message queue, wherein the persistent message queue includes POS application data generated by the POS application off-line instructions when the data connection between the terminal and the server is inoperable.

20. (Original) The system of claim 16, wherein the plurality of data system interface instructions are object-oriented software modules.

21. (Original) The system of claim 16, wherein the plurality of data system interface instructions are Java beans.

22. (Previously Presented) A method of integrated processing of information from a plurality of data systems, the method comprising:

receiving login information of a user provided from a terminal through an interface to a user profile instruction object of a server to thereby establish a first communication session;

determining at the server and by the user profile instruction object that the user has system access rights based at least in part on the received login information;

accessing by the user profile instruction object of the server a database of data systems user access rights, the database of data system user access rights storing the access rights of a plurality of users with respect to a plurality of data systems;

determining at the server and by the user profile instruction object the set of data systems of the plurality of data systems to which the user has access, the determining being based at least in part on the login information and the database of data systems user access rights;

establishing a session with each data system for which the user has access;

upon establishing the session with each data system, providing icons corresponding to the data systems to the terminal where the icons provide access from the terminal to the data systems via the server; and

communicating through an application programming interface of each of a plurality of instruction objects of the server to each of the plurality of data systems corresponding to each of the instruction objects for which the user has access rights based on the previously received login information through the first session to exchange transactional data that is based on communications with the terminal between the server and the plurality of data systems through communication sessions separate from the first communication session and communicating through the interface of the server to the terminal through the first communication session and after having received the login information and after having determined the set of data systems to which the user has

access rights to exchange transactional data related to only the data systems for which the user has access rights between the terminal and the server.

23. (Previously Presented) The method of claim 22, further comprising sending data system access rights information to the terminal, the data system access rights information based at least in part on the determined set of data systems of the plurality of data systems to which the user has access.

24. (Original) The method of claim 22, wherein the plurality of data systems includes a first data system and a second data system, the first data system and the second data system being selected from the group consisting of a credit services system, an inventory services system, a customer services system, and an activation services system.

25. (Previously Presented) The method of claim 23, further comprising:  
receiving the data system access rights information at the terminal; and  
displaying a set of data system applications at the terminal for exchanging data between the terminal and each of the plurality of instruction objects of the server, each data system application of the set of data system applications corresponding to a respective data system of the determined set of data systems of the plurality of data systems to which the user has access.

26. (Previously Presented) A system of integrated processing of information from a plurality of data systems, the system comprising:  
means for receiving at a server login information of a user from a terminal to thereby establish a first communication session;  
means for determining at the server that the user has system access rights based at least in part on the received login information;  
means for accessing a database of data systems user access rights at the server, the database of data system user access rights storing the access rights of a plurality of users with respect to a plurality of data systems;



means for determining at the server the set of data systems of the plurality of data systems to which the user has access based at least in part on the login information and the database of data systems user access rights;

means for establishing a session with each data system for which the user has access;

means for, upon establishing the session with each data system, providing icons corresponding to the data systems to the terminal where the icons provide access from the terminal to the data systems via the server;

means for communicating through an application programming interface of each of a plurality of instruction objects of the server to each of the plurality of data systems corresponding to each of the instruction objects for which the user has access rights based on the previously received login information through the first session to exchange transactional data that is based on communications with the terminal between the server and the plurality of data systems through communications sessions separate from the first communication session; and

means for communicating through ~~through~~ an interface of the server to the terminal through the first communication session and after having received the login information and after having determined the set of data systems to which the user has access rights to exchange transactional data related to only the data systems for which the user has access rights between the terminal and the server.

27. (Previously Presented) The system of claim 26, further comprising means for sending data system access rights information to the terminal, the data system access rights information based at least in part on the determined set of data systems of the plurality of data systems to which the user has access.

28. (Original) The system of claim 26, wherein the plurality of data systems includes a first data system and a second data system, the first data system and the second data system being selected from the group consisting of a credit services system, an inventory services system, a customer services system, and an activation services system.

29. (Previously Presented) The system of claim 27, further comprising:

means for receiving the data system access rights information at the terminal; and

means for displaying a set of data system applications at the terminal, each data system application of the set of data system applications corresponding to a respective data system of the determined set of data systems of the plurality of data systems to which the user has access.

30. (Previously Presented) A computer-readable medium storing a plurality of instructions to be executed by a processor of a server for integrated processing of information from a plurality of data systems, the plurality of instructions comprising instructions to:

receive login information of a user at the server from a terminal to thereby

establish a first communication session between the terminal and the server;

determine at the server that the user has system access rights based at least in part on the received login information;

access a database of data systems user access rights, the database of data system user access rights storing the access rights of a plurality of users with respect to a plurality of data systems;

determine at the server the set of data systems of the plurality of data systems to which the user has access, based at least in part on the login information and the database of data systems user access rights;

establish a session with each data system for which the user has access;

upon establishing the session with each data system, provide icons corresponding to the data systems to the terminal where the icons provide access from the terminal to the data systems via the server; and

communicate through an application programming interface of each of a plurality of instruction objects of the server to each of the plurality of data systems corresponding to each of the instruction objects for which the user has access rights based on the previously received login information through the first session to exchange transactional data that is based on communications with the terminal between the server and the plurality of data systems through communication sessions separate from the first

communication session and communicating through an interface of the server to the terminal through the first communication session and after having received the login information and after having determined the set of data systems to which the user has access rights to exchange transactional data related to only the data systems for which the user has access rights between the terminal and the server.

31. (Previously Presented) The computer-readable medium of claim 30, further comprising instructions to send data system access rights information to the terminal, the data system access rights information based at least in part on the determined set of data systems of the plurality of data systems to which the user has access.

32. (Original) The computer-readable medium of claim 30, wherein the plurality of data systems includes a first data system and a second data system, the first data system and the second data system being selected from the group consisting of a credit services system, an inventory services system, a customer account services system, and an activation services system.

33. (Previously Presented) The computer-readable medium of claim 31, further comprising instructions to:

- cause the terminal to receive the data system access rights information; and
- cause the terminal to display a set of data system applications, each data system application of the set of data system applications corresponding to a respective data system of the determined set of data systems of the plurality of data systems to which the user has access.

34. (Previously Presented) A system for integrated processing of information from a plurality of data systems, the system comprising:

- a plurality of data systems, each data system of the plurality of data systems having unique user access rights, wherein each data system of the plurality of data system is associated with a respective data system application of a plurality of data system applications;

a server coupled to the plurality of data systems via individual communication sessions, the server including a plurality of data system application programming interface instructions, wherein each data system interface instructions of the plurality of data system application programming interface instructions corresponds to a respective data system application of the plurality of data system applications, the server including a data systems user access database that stores user access rights to each data system of the plurality of data systems;

a terminal coupled to the server, the terminal including system access instructions, wherein the system access instructions send login information of a user to the server to thereby establish a first communication session with the server that is separate from the individual communication sessions, the terminal displays icons that represent and provide access to selected data systems applications after the server logs in to each of the selected data systems via the individual communications sessions and then provides a notice of the login to the terminal, the selected data system applications corresponds to a set of data system applications to which the user has access rights, and the set of data system applications to which the user has access rights is determined based at least in part on the login information of the user and the data systems user access database;

a point-of-sale (POS) database coupled to the server, the server including a POS application, the terminal displaying the POS application, and wherein the terminal includes POS application off-line instructions to provide POS application functions when a data connection between the terminal and the server is inoperable; and

a data storage device to store a persistent message queue, wherein the persistent message queue includes POS application data generated by the POS application off-line instructions when the data connection between the terminal and the server is inoperable.